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10/816,843	04/05/2004	Shoko Ihori	25116-US6	2707
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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER				
HIGHTER, TREVILLIAN H				
ART UNIT		PAPER NUMBER		
2151				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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# Office Action Summary

**Application No.**

10/816,843

**Applicant(s)**

IHORI ET AL.

**Examiner**

TREVILLIAN HIGHTER

**Art Unit**

2151

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

**DETAILED ACTION**

1. Claims 1-30 are pending in this application.

***Specification***

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o).

Correction of the following is required: The Applicant explicitly states a "computer readable medium," however, the applicant defines a "recording medium" ([0225], lines 1-15). For examination purposes, computer readable medium is interpreted as the "recording medium".

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 2 recites the limitation "reunification apparatus." It is unclear to Examiner what a "reunification apparatus means".
4. Claim 2 recites the limitation "said first reunification apparatus". There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- 9. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hansen et al. (US Patent No. 7,103,018 B1), in view of Meenan et al. (US Patent No. 7,313,384 B1).**

10. With respect to claim 1, Hansen discloses a first radio communication apparatus; and a second radio communication apparatus configured to communicate with said first radio communication apparatus by radio communication through said radio network (column 7, lines 52-56); said second radio communication apparatus configured to transmit request information for requesting for transmission of the communication information to said first radio communication apparatus by radio communication column 7, lines 52-61); said first radio communication apparatus configured to transmit the first and second information as a response to the request information transmitted thereto from said second radio communication apparatus (column 8, lines 6-10, shows the process of forwarding (transmitting) data as a response to the request for information). Hansen does not disclose first information for identification of a radio network and second information regarding the

security are set in advance as communication information necessary for communication through said radio network; and said first and second radio communication apparatuses utilizing the communication information individually set therein to communicate with each other by radio communication; and said second radio communication apparatus configured to set the first and second information transmitted thereto from said first radio communication apparatus as the communication information.

Meenan, however, discloses first information for identification of a radio network and second information regarding the security are set in advance as communication information necessary for communication through said radio network (column 1, lines 41-44; column 2, lines 38-43); and said second radio communication apparatus configured to set the first and second information transmitted thereto from said first radio communication apparatus as the communication information (column 6, lines 12-18, 48-55; column 4, lines 6-8); and said first and second radio communication apparatuses utilizing the communication information individually set therein to communicate with each other by radio communication (column 1, lines 17-21, 41-44);

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Hansen with the teachings of Meenan, in order to allow wireless configuration information to be shared with wireless devices.

11. With respect to claim 2, Hansen transmitting by said second radio communication apparatus request information for requesting for transmission of the

communication information to said first radio communication apparatus by radio communication (column 7, lines 52-61); transmitting by said first reunification apparatus the first and second information as a response to the request information transmitted thereto from said second radio communication apparatus (column 8, lines 6-10).

Hansen does not disclose setting by the second radio communication apparatus the first and second information transmitted thereto from said first radio communication apparatus as the communication information; and utilizing by said first and second radio communication apparatuses the communication information individually set therein to communicate with each other by radio communication.

Meenan, however, discloses setting by the second radio communication apparatus the first and second information transmitted thereto from said first radio communication apparatus as the communication information (column 6, lines 12-18, 48-55; column 4, lines 6-8); and utilizing by said first and second radio communication apparatuses the communication information individually set therein to communicate with each other by radio communication (column 1, lines 17-21, 41-44).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Hansen with the teachings of Meenan, in order to allow wireless configuration information to be shared with wireless devices.

**12. Claims 1-3, 6, 7, 9-11, 14-15, 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hansen, in view of Meenan, and further in view of Gassho et al. (US Publication No. 2003/0092395 A1).**

13. With respect to claim 3, Hansen discloses transmission of the first and second information to said different radio communication apparatus as a response to the request information by radio communication (column 8, lines 6-10, when requested data is forwarded, it is apparent the receiving device must be configured to receive the data).

Hansen and Gassho do not disclose setting means in which first information for identification of said radio network and second information regarding the security are set as communication information necessary for communication through said radio network.

Meenan, however, discloses setting means in which first information for identification of said radio network and second information regarding the security are set as communication information necessary for communication through said radio network (column 6, lines 12-18, 48-55; column 4, lines 6-8).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Hansen and Gassho with the teachings of Meenan, in order to allow wireless configuration information to be shared with wireless devices.

Hansen and Meenan do not disclose transmission control means for controlling, when request information for requesting for transmission of the communication

information is received from said different radio communication apparatus by radio communication.

Gassho, however, discloses transmission control means for controlling, when request information for requesting for transmission of the communication information is received from said different radio communication apparatus by radio communication ([0010], lines 1-5; [0011], lines 1-8; [0004], lines 5-9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Hansen and Meenan with the teachings of Gassho, in order to ensure security for settings in a wireless communication device in a wireless environment.

14. With respect to claim 6, the claim is rejected for the same reason as claim 3 above. In addition, Meenan discloses the first information is a Service Set Deification (column 6, lines 12-18).

15. With respect to claims 7, the claim is rejected for the same reason as claim 3 above. In addition, Meenan discloses the second information is a Wired Equivalent Privacy key (column 6, lines 12-18).

**16. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hansen, in view of Gassho.**



17. With respect to claim 9, Hansen discloses transmission of first information for identification of said radio network and second information regarding the security set as communication information in said radio communication apparatus in advance by radio communication from said radio communication apparatus to said different radio communication apparatus as a response to the request information (column 8, lines 6-10, when requested data is forwarded, it is apparent the receiving device must be configured to receive the data).

Hansen does not disclose controlling, when request information for requesting for transmission of communication information necessary for communication through said radio network is transmitted from said different radio communication apparatus to said radio communication apparatus by radio communication.

Gassho, however, discloses controlling, when request information for requesting for transmission of communication information necessary for communication through said radio network is transmitted from said different radio communication apparatus to said radio communication apparatus by radio communication ([0010], lines 1-5; [0011], lines 1-8; [0004], lines 5-9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Hansen with the teachings of Gassho, in order to ensure security for settings in a wireless communication device in a wireless environment.

18. With respect to claim 10, Hansen discloses transmission of first information for identification of said radio network and second information regarding the security set as communication information in said radio communication apparatus in advance by radio communication from said radio communication apparatus to said different radio communication apparatus as a response to the request information (column 8, lines 6-10, when requested data is forwarded, it is apparent the receiving device must be configured to receive the data).

Hansen does not disclose controlling, when request information for requesting for transmission of communication information necessary for communication through said radio network is transmitted from said different radio communication apparatus to said radio communication apparatus by radio communication.

Gassho, however, discloses controlling, when request information for requesting for transmission of communication information necessary for communication through said radio network is transmitted from said different radio communication apparatus to said radio communication apparatus by radio communication ([0010], lines 1-5; [0011], lines 1-8; [0004], lines 5-9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Hansen with the teachings of Gassho, in order to ensure security for settings in a wireless communication device in a wireless environment.

**19. Claims 11, 14, 15, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meenan, in view of Gassho.**

20. With respect to claim 11, Meenan discloses setting means for setting, when first information for identification of said radio network and second information regarding the security are transmitted as the communication information from said different radio communication apparatus to said radio communication apparatus by radio communication in response to the request information transmitted from said radio communication apparatus under the control of said transmission control means, the first and second information as the communication information therein (column 6, lines 12-18, 48-55; column 4, lines 6-8).

Meenan do not disclose transmission control means for controlling transmission of request information for requesting for transmission of communication information necessary for communication through said radio network to said different radio communication apparatus by radio communication.

Gassho, however, discloses transmission control means for controlling transmission of request information for requesting for transmission of communication information necessary for communication through said radio network to said different radio communication apparatus by radio communication ([0010], lines 1-5; [0011], lines 1-8; [0004], lines 5-9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Meenan with the teachings of Gassho, in

order to ensure security for settings in a wireless communication device in a wireless environment.

21. With respect to claim 19, Meenan discloses setting, when first information for identification of said radio network and second information regarding the security are transmitted as the communication information from said different radio communication apparatus to said radio communication apparatus by radio communication in response to the request information transmitted from said radio communication apparatus under the control of the process at the controlling, the first and second information as the communication information therein (column 6, lines 12-18, 48-55; column 4, lines 6-8).

Meenan do not disclose a transmission control step of controlling transmission of request information for requesting for transmission of communication information necessary for communication through said radio network to said different radio communication apparatus by radio communication.

Gassho, however, discloses a transmission control step of controlling transmission of request information for requesting for transmission of communication information necessary for communication through said radio network to said different radio communication apparatus by radio communication ([0010], lines 1-5; [0011], lines 1-8; [0004], lines 5-9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Meenan with the teachings of Gassho, in

order to ensure security for settings in a wireless communication device in a wireless environment.

22. With respect to claim 20, Meenan discloses setting, when first information for identification of said radio network and second information regarding the security are transmitted as the communication information from said different radio communication apparatus to said radio communication apparatus by radio communication in response to the request information transmitted from said radio communication apparatus under the control of the process at the transmission control step, the first and second information as the communication information therein (column 6, lines 12-18, 48-55; column 4, lines 6-8).

Meenan does not disclose controlling transmission of request information for requesting for transmission of communication information necessary for communication through said radio network to said different radio communication apparatus by radio communication.

Gassho, however, discloses controlling transmission of request information for requesting for transmission of communication information necessary for communication through said radio network to said different radio communication apparatus by radio communication ([0010], lines 1-5; [0011], lines 1-8; [0004], lines 5-9).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Meenan with the teachings of Gassho, in

order to ensure security for settings in a wireless communication device in a wireless environment.

23. With respect to claim 14, the claim is rejected for the same reason as claim 11 above. In addition, Meenan discloses the first information is a Service Set Deification (column 6, lines 12-18).

24. With respect to claim 15, the claim is rejected for the same reason as claim 11 above. In addition, Meenan discloses the second information is a Wired Equivalent Privacy key (column 6, lines 12-18).

**25. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hansen, in view of Meenan, in view of Gassho, and further in view of Mikel et al. (US Publication No. 2003/0079143 A1).**

26. With respect to claim 8, Hansen, Meenan, Gassho do not disclose encryption means for encrypting the communication information at least once, said transmission control means controlling the transmission of the communication information encrypted by said encryption means.

Mikel, however, discloses encryption means for encrypting the communication information at least once ([0009], lines 1-4), said transmission control means controlling

the transmission of the communication information encrypted by said encryption means ([0009], lines 1-4).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Hansen, Meenan, and Gassho with the teachings of Mikel, in order to ensure security for settings in a wireless communication device in a wireless environment.

**27. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hansen, Meenan, and Gassho, in view of Kuan et al. (Publication No. US 2003/0224797 A1).**

28. With respect to claim 4, Hansen, Meenan, and Gassho do not disclose the request information is a probe request.

Kuan, however, discloses the request information is a probe request ([0051], lines 6-8; [0052], lines 1-10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Hansen, Meenan, and Gassho with the teachings of Kuan in order to increase the efficiency of data access in a wireless environment.

29. With respect to claim 5, the claim is rejected for the same reason as claim 12 above. In addition, Kuan discloses a management frame is utilized for the transmission

of the request information and the communication information ([0051], lines 6-8; [0052], lines 1-10, a management frame includes a probe request frame; a station sends a probe request frame when it needs to obtain information from another station).

**30. Claims 12, 13, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meenan, in view of Gassho, and further in view of Kuan.**

31. With respect to claim 12, Meenan and Gassho do not disclose the request information is a probe request.

Kuan, however, discloses the request information is a probe request ([0051], lines 6-8; [0052], lines 1-10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Meenan, and Gassho with the teachings of Kuan in order to increase the efficiency of data access in a wireless environment.

32. With respect to claim 13, the claim is rejected for the same reason as claim 12 above. In addition, Kuan discloses a management frame is utilized for the transmission of the request information and the communication information ([0051], lines 6-8; [0052], lines 1-10, a management frame includes a probe request frame; a station sends a probe request frame when it needs to obtain information from another station).



33. With respect to claim 17, the claim is rejected for the same reason as claim 12 above. In addition, Kuan discloses said radio communication apparatus is a personal computer card for a radio local area network ([0021], lines 5-8, PC cards are available as network cards).

**34. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Meenan, in view of Gassho, and further in view of Kameda (US Patent No. 5,940,772), hereinafter, Kameda.**

35. With respect to claim 16, Meenan and Gassho do not disclose conversion means for converting a signal transmitted thereto through said radio network into a signal which can be transmitted through a wire circuit and converting a signal transmitted thereto through said wire circuit into a signal which can be transmitted in said radio network.

Kameda, however, discloses conversion means for converting a signal transmitted thereto through said radio network into a signal which can be transmitted through a wire circuit and converting a signal transmitted thereto through said wire circuit into a signal which can be transmitted in said radio network (Abstract, lines 8-19).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Meenan and Gassho with the teachings of Kameda in order to improve a data transmission system for a radio section in that the transmission rate can change in response to circuit conditions to achieve maximum transmission efficiency.

**36. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Meenan and Gassho, in view of Yoshizawa (Publication No. EP 0 311 112). Yoshizawa is cited in the Information Disclosure Statement by applicant on 5/30/2007.**

37. With respect to claim 18, Meenan and Gassho does not disclose decryption means for decrypting, where the first and second information transmitted thereto from said different radio communication apparatus are in a form encrypted at least once, the encrypted first and second information, said setting means setting the first and second information decrypted by said decryption means as the communication information.

Yoshizawa, however, discloses decryption means for decrypting (column 1, lines 37-39), where the first and second information transmitted thereto from said different radio communication apparatus are in a form encrypted at least once (column 1, lines 37-39, if serial data, code from a code setting unit, is decrypted, encryption must be implemented, lines 18-24), the encrypted first and second information, said setting means setting the first and second information (Abstract, lines 18-19) decrypted by said decryption means as the communication information (column 1, lines 37-39, 18-24) .

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Meenan and Gassho with the teachings of Yoshizawa in order for privacy to be protected and security to be ensured.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TREVILLIAN HIGHTER whose telephone number is (571)270-3806. The examiner can normally be reached on Monday-Friday 8:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571)272-3984. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

THH 8/15/2008

Art Unit 2151

/Bunjoo Jaroenchonwanit/  
Supervisory Patent Examiner, Art Unit 2152

